

~~ABSTRACT~~

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5 The present invention provides such a gas discharge type display panel that has a high mechanical strength and a high reliability, is enabled to be driven with lower voltage, and providing a higher brightness and sized in a large dimension, and its manufacturing method with higher production efficiency. By means of applying the sealing operation along with the exhausting operation, the sealing glass 14 is made broken down by the pressure difference between the inside and outside of the panel, and thus, the clearance gap between the substrates can be controlled to be desired. In addition, the gaseous component unnecessary for the discharge operation is exhausted by keeping the temperature of the amorphous sealing glass exceeding its softening point and no more than its working point. In the structure of the gas discharge type display panel, a protruding portion having a curvature radius between 0.1 mm and 1 mm is formed on the sealing glass in order to reduce the dispersion in the thickness of the sealing glass, or the cross-sectional shape of the sealing glass is made convex with respect to the internal space both at its inside end part and its outside end part.

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(51) 国際特許分類7 H01J 9/26, 11/02		A1	(11) 国際公開番号 WO00/45411
			(43) 国際公開日 2000年8月3日(03.08.00)
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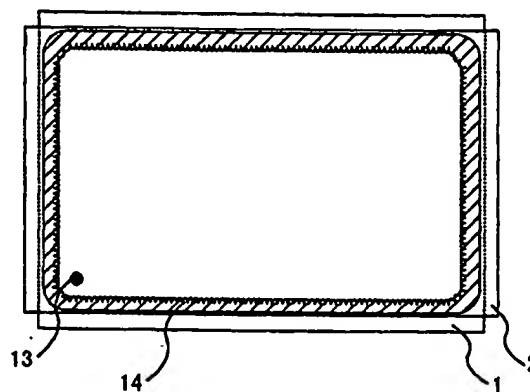
(54)Title: GAS DISCHARGE TYPE DISPLAY PANEL AND PRODUCTION METHOD THEREFOR

(54)発明の名称 ガス放電型表示パネルおよびその製造方法

(57) Abstract

A high-luminance, large-screen gas discharge type display panel high in strength reliability and capable of low voltage driving, and a high-efficient production method therefor, wherein a pressure difference between inside and outside of the panel produced by sealing while evacuating is used to crush sealing glass (14) to set a space between substrates to a desired size, and the part of gas unneeded for discharging is evacuated with the sealing amorphous glass kept within a temperature range, above its softening point and below its working point. The gas discharge type display panel has projections the radius of curvature of which is at least 0.1 mm and up to 1 mm formed on the sealing glass to suppress variations in sealing glass thickness, or has the cross section of the sealing glass curved outwardly toward the inner space side at both inner side end and outer side end.

(a)



(b)

